The Spanish version of the Work-related Acceptance and Action Questionnaire (WAAQ)

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Abstract

Background: Psychological flexibility, a key construct of Acceptance and Commitment Therapy (ACT), has recently been found to be an important determinant of mental health and behavioral effectiveness in the workplace. This finding has led to designing a measure of psychological flexibility especially tailored to the workplace (the Work-related Acceptance and Action Questionnaire; WAAQ) in the hope that it may reveal even stronger associations with variables related to a work context. Method: First, we back-translated the WAAQ into Spanish and then administered it to 209 workers, in addition to other relevant work-related measures. Results: Data were very similar to those obtained with the original WAAQ version. The WAAQ showed a very good internal consistency (α = .92) and a clear one-factor structure. It also showed higher correlations with work-specific measures than a general measure of psychological inflexibility (the Acceptance and Action Questionnaire-II; AAQ-II). As hypothesized by the ACT theory, the correlation between the WAAQ and the AAQ-II was moderate but not so high as to suggest that they are assessing the same construct. Conclusions: This Spanish translation of the WAAQ emerges as a reliable and valid measure of psychological flexibility in relation to the workplace.

Keywords: Work-related Acceptance and Action Questionnaire, psychological flexibility, Acceptance and Commitment Therapy, Acceptance and Action Questionnaire.

Resumen

Versión española del Cuestionario de Aceptación y Acción Relacionado con el Trabajo (WAAQ). Antecedentes: la flexibilidad psicológica, un constructo central en la Terapia de Aceptación y Compromiso (ACT), ha mostrado ser un determinante importante de la salud mental y la efectividad conductual en el trabajo. Estos hallazgos han llevado a diseñar una medida de flexibilidad psicológica ajustada al contexto laboral (Cuestionario de Aceptación y Acción en el Trabajo; WAAQ) que pudiera mostrar asociaciones incluso mayores con variables relacionadas con el contexto laboral. Método: se realizó una traducción inversa del WAAQ en español y se aplicó a 209 trabajadores conjuntamente con otras medidas. Resultados: los datos obtenidos fueron muy similares a los de la versión original. El WAAQ mostró muy buena consistencia interna (α = .92) y una estructura unifactorial. Además, el WAAQ mostró correlaciones más altas con medidas específicas del contexto laboral que una medida general de inflexibilidad psicológica (el Cuestionario de Aceptación y Acción - II; AAQ-II). Tal y como hipotetiza el modelo de ACT, la correlación entre el WAAQ y el AAQ-II fue moderada y no tan grande como para sugerir que ambos cuestionarios miden el mismo constructo. Conclusiones: la presente versión española del WAAQ se muestra como una medida fiable y válida de la flexibilidad psicológica en el contexto laboral.

Palabras clave: Cuestionario de Aceptación y Acción en el Trabajo, flexibilidad psicológica, Terapia de Aceptación y Compromiso, Cuestionario de Aceptación y Acción.
ACT interventions aimed at increasing psychological flexibility have improved performance in several domains (e.g., Bond, Flaxman, van Veldhoven, & Biron, 2010; Ruiz & Luciano, 2009, 2012). In relation to the workplace, Bond and Hayes (2002) proposed that the “goal-related context sensitivity” feature of psychological flexibility would help people to behave more effectively at work. Indeed, Bond, Lloyd, and Guenole (2013) have recently identified approximately 20 studies that have shown that psychological flexibility correlates with, and longitudinally predicts, a wide range of work-related outcomes, including mental health, better job performance, increased capacity to learn skills at work, and absence rates (e.g., Bond & Bunce, 2003; Bond & Flaxman, 2006; Donaldson & Bond, 2004) even when controlling for negative affectivity and locus of control (Bond & Bunce, 2003), and emotional intelligence (Donaldson & Bond, 2004). Moreover, ACT interventions designed to improve employee mental health, increase employees’ innovation, and reduce burnout have been effective, as hypothesized, through increasing psychological flexibility (Bond & Bunce, 2000; Flaxman & Bond, 2010; Lloyd, Bond, & Flaxman, 2013).

The previous studies have assessed psychological flexibility in the workplace by administering the Acceptance and Action Questionnaire (AAQ; Hayes et al., 2004) or the Acceptance and Action Questionnaire - II (AAQ-II; Bond et al., 2011). These instruments were designed to measure general levels of psychological flexibility, as averaged across different contexts, in clinical and community samples. Nevertheless, the ACT model suggests that psychological flexibility is contextually controlled and, therefore, can vary across different contexts (e.g., Bond et al., 2013). For instance, a person may show considerable psychological flexibility in the context of sport competitions (e.g., training as much as possible even in the presence of physical pain or stress), but at the same time, she may show psychological inflexibility in the work context by allowing herself to be controlled by her fears of failure instead of by her values.

An implication of the previous suggestion is that psychological flexibility measures tailored to specific contexts (e.g., workplace) may be more strongly associated with specific variables of that context (e.g., work engagement). Bond et al. (2013) tested this implication by developing a measure of psychological flexibility in relation to the workplace (the Work-related Acceptance and Action Questionnaire; WAAQ) and examining the extent to which the AAQ-II and the WAAQ correlated with specific workplace measures (e.g., work engagement, task performance). These authors found that the WAAQ had good psychometric properties. As hypothesized, the AAQ-II and WAAQ were moderately correlated but the WAAQ was a somewhat better predictor of work-related measures.

The current study aimed to analyze the psychometric properties of the Spanish translation of the WAAQ with a sample of 209 employees and to examine whether it is more strongly associated with work-specific measures than a general measure of psychological flexibility (the AAQ-II). Based on the previous study (Bond et al., 2013), we hypothesized that the Spanish translation of the WAAQ would have similar psychometric properties and construct validity to the original scale, and that it would show stronger correlations with some work-related measures than the AAQ-II.

Method

Participants

The sample consisted of 209 employees from the south of Spain, with age ranging between 18 and 60 years (M = 36.1, SD = 12.13). Fifty-two percent were men. The relative educational level of the participants was as follows: 23.4% primary studies, 48.8% mid-level study graduates, and 27.8% college graduates or currently taking university courses. The mean number of years spent in their current job was 7.94 (SD = 9.68), working 35.5 (SD = 10.82) hours per week: 29.6% worked by day with a lunch break, 20.2% had an intensive working schedule, 14.8% had flextime, 12.3% worked half a day, 10.3% had a fixed shift, and 12.8% had a rotating shift.

Regarding their working positions, 16.7% of participants were in an illegal situation or without compensation, 16.3% were temporary workers, 25.1% had a contract for between 6 months and 5 years, and 41.9% had an indefinite contract. With respect to participants’ hierarchy within the organization, 79% were line-level workers, 5.9% supervisors, 7.3% middle management, 4.4% managers, and 2.4% corporate managers.

Instruments

Acceptance and Action Questionnaire - II (AAQ-II; Bond et al., 2011). The AAQ-II is a general measure of psychological inflexibility. It consists of 7 items which are rated on a 7-point Likert-type scale ranging from 1 (never true) to 7 (always true). The items reflect unwillingness to experience unwanted emotions and thoughts (e.g., “I am afraid of my feelings,” “I worry about not being able to control my worries and feelings”) and the inability to be in the present moment and behave according to value-directed actions when experiencing psychological events that could undermine them (e.g., “My painful experiences and memories make it difficult for me to live a life that I would value,” “My painful memories prevent me from having a fulfilling life,” “Worries get in the way of my success”). Recent studies have shown that the AAQ-II has better psychometric properties and a clearer factor structure than the first AAQ version (Bond et al., 2011). In this study, we used the Spanish translation by Ruiz, Langer, Luciano, Cangas, and Beltrán (2013), which has shown a one-factor solution, good internal consistency (mean α = .88), and discriminant, convergent and divergent validity.

Work-related Acceptance and Action Questionnaire (WAAQ; Bond et al., 2013). The WAAQ is a 7-item scale that measures psychological flexibility in relation to the workplace. The items reflect the extent to which people can take goal-directed action in the presence of difficult internal experiences (e.g., “I am able to work effectively in spite of any personal worries that I have,” “I can still work very effectively, even if I am nervous about something,” “I can work effectively, even when I doubt myself”). The items are rated on a 7-point Likert-type scale ranging from 1 (never true) to 7 (always true). Higher scores indicate greater levels of work-related psychological flexibility. The WAAQ has shown a satisfactory one-factor structure, reliability (mean α = .83), and external, convergent, concurrent, and predictive validity. For instance, in comparison with the AAQ-II, the WAAQ correlates more strongly with work-specific variables (Bond et al., 2013). In the present study, we translated the WAAQ into Spanish following...
the recommendations proposed by Muñiz and Hambleton (1996). Thus, we selected two translators, one familiar with the Spanish culture and another familiar with that of the USA, and used the “back-translation” method; that is, the first translator translated the questionnaire into Spanish, and this translation was then translated back into English by the second one (see items translation in Table 1).

Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). The MBI-GS is a generic measure of burnout and consists of 16 items that are rated on a 7-point Likert-type scale. It contains three factors: Emotional Exhaustion (e.g., “I feel emotionally drained from my work”), Cynicism (e.g., “I have become less enthusiastic about my work”), and Professional Efficacy (e.g., “I can effectively solve the problems that arise in my work”). Higher scores on Emotional Exhaustion and Cynicism and lower scores on Professional Efficacy are indicative of greater levels of burnout. In the present study, we used the Spanish translation by Salanova, Schaufeli, Llorrens, Peiró, and Grau (2000), which showed adequate psychometric properties.

Utrecht Work Engagement Scale (UWES; Schaufeli, Bakker, & Salanova, 2006). The UWES is a 15-item, 7-point Likert-type scale that aims to measure work engagement as a construct opposed to burnout. It contains three factors: Vigor (e.g., “At my work, I feel bursting with energy”), Dedication (e.g., “I find the work that I do full of meaning and purpose”), and Absorption (e.g., “Time flies when I am working”). We used the Spanish translation by Salanova et al. (2000), which showed appropriate psychometric properties in several studies (e.g., Schaufeli, Martínez, Marqués-Pinto, Salanova, & Bakker, 2002; Schaufeli, Salanova, González-Roma, & Bakker, 2002).

Overall Job Satisfaction Scale (OJS; Warr, Cook, & Wall, 1979). The OJS is a 15-item, 7-point Likert-type scale that provides a general measure of job satisfaction. It contains two factors: Intrinsic Satisfaction, related to self-fulfillment and appreciation, and Extrinsic Satisfaction, related to reward and work conditions. We used the Spanish translation by Munduate (1984), which showed good psychometric properties in several studies (e.g., Augusto-Landa, López-Zafra, Martínez, & Pulido, 2006).

Psychological Empowerment Inventory (PEI; Spreitzer, 1995). The PEI is a 12-item, 7-point Likert-type scale that measures psychological empowerment in a workplace context. It contains four factors with 3 items each: Meaning (e.g., “The work I do is very important to me”), Competence (e.g., “I am confident about my ability to do my job”), Self-determination (e.g., “I have significant autonomy in determining how I do my job”), and Impact (e.g., “My impact on what happens in my department is large”). The PEI has shown good psychometric properties and validity. For the present study, we translated the PEI into Spanish following the same back-translation method described for the WAAQ (Muñiz & Hambleton, 1996). The alpha coefficient found in the present sample for the full scale was very good (\( \alpha = .90 \)). Alpha coefficients of the subscales were .88 for Meaning, .81 for Competence, .82 for Self-determination, and .78 for Impact.

Procedure

Participants were recruited from undergraduate labor science students and personal contacts. Individuals who provided informed consent were given a questionnaire packet including the self-report instruments in the order listed above. Upon completion of the study, we debriefed participants about the aims of the study and thanked them for their participation.

Data analysis

First, to explore the internal consistency of the WAAQ, corrected item-total correlations and Cronbach’s alpha were computed. Second, the mean score and standard deviation were calculated. Third, the Kaiser-Meyer-Olkin index and the Bartlett sphericity test were computed to determine whether the data were apt for conducting factor analyses. Subsequently, an exploratory factor analysis by principal component analysis was conducted. Lastly, the Pearson correlations between the WAAQ and the other scales were computed. Coefficient correlations were interpreted following Cohen’s (1998) suggestion of small (.1), medium (.3), and large (.5).

Results

Item analysis of the WAAQ

Table 1 shows the mean score for each item and the corrected item-total correlations. Mean scores ranged from 4.93 (SD = 1.38) for Item 4 to 5.53 for Item 1 (SD = 1.51) whereas corrected item-total correlations ranged from .65 (Item 4) to .81 (Item 6). Cronbach’s alpha of the WAAQ was .92.

Descriptive data

Table 2 shows that participants obtained a mean score of 36.46 (SD = 8.41). Women’s scores were higher (M = 37.48, SD = 8.03) than men’s scores (M = 35.5, SD = 8.68), but this difference did not reach statistical significance, t(203) = -1.70, p = .09.

Construct validity

Factor analysis. Data were apt for conducting a factor analysis according to the Kaiser-Meyer-Olkin index (.90) and the Bartlett sphericity test (\( \chi^2 = 933.97, p<.0001 \)). Table 2 shows the Spanish translation of the WAAQ items, which showed good communalities (Costello & Osborne, 2005) and loadings on the main factor ranging from .74 (Item 4) to .86 (Item 6). Figure 1 shows the scree plot resulting from the exploratory factor analysis. A clear one-factor solution was found according to the Kaiser criterion. This factor explained 66.79% of the variance in item scores.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Mean scores (SD in Brackets) per item and correlations between each item and the total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>Mean score ( M ) (SD)</td>
</tr>
<tr>
<td>Item 1</td>
<td>5.53 (1.51)</td>
</tr>
<tr>
<td>Item 2</td>
<td>5.33 (1.44)</td>
</tr>
<tr>
<td>Item 3</td>
<td>5.27 (1.45)</td>
</tr>
<tr>
<td>Item 4</td>
<td>4.93 (1.38)</td>
</tr>
<tr>
<td>Item 5</td>
<td>5.10 (1.43)</td>
</tr>
<tr>
<td>Item 6</td>
<td>5.12 (1.51)</td>
</tr>
<tr>
<td>Item 7</td>
<td>5.18 (1.58)</td>
</tr>
</tbody>
</table>
Correlations with related measures. Table 3 shows the correlations between the scores on the AAQ-II and WAAQ with the remaining measures used in this study. Consistent with previous studies (Bond et al., 2013), the WAAQ showed a small to moderate negative correlation with the AAQ-II \( r = -0.20 \). The WAAQ showed a small correlation with the Emotional Exhaustion subscale of the MBI \( r = -0.18 \) and a moderate correlation with the Cynicism subscale \( r = -0.29 \). Higher levels of work-related psychological flexibility were strongly correlated with measures related to job performance \( r = 0.62 \) with the Professional Efficacy subscale of the MBI, and \( r = 0.50 \) with the Competence subscale of the PEI. WAAQ scores also showed medium to large correlations with work engagement as measured by the UWES \( r = 0.38, 0.33, 0.50, 0.23, \) and \( 0.21 \), respectively, for the total score, Vigor, Dedication, and Absorption). Small correlations were found between the WAAQ and job satisfaction as measured by the OJS \( r = 0.16, 0.12, \) and \( 0.18 \), respectively, for the total score, extrinsic, and intrinsic job satisfaction). Lastly, the WAAQ showed small to large correlations with psychological empowerment \( r = 0.38, 0.33, 0.50, 0.23, \) and \( 0.21 \), respectively, with the total-scale score, Meaning, Competence, Self-determination, and Impact).

The AAQ-II revealed somewhat different patterns of correlations from the WAAQ (see Table 3). Specifically, the AAQ-II showed lower correlations than the WAAQ with measures of work efficacy (i.e., the Professional Efficacy subscale of the MBI and the Competence subscale of the PEI), and with work engagement as measured by the UWES. However, the AAQ-II showed higher correlations than the WAAQ with psychological distress as measured by the Emotional Exhaustion subscale of the MBI and with job satisfaction as measured by the OJS.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Correlations</th>
<th>AAQ-II</th>
<th>WAAQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAQ-II – General Psychological Inflexibility</td>
<td>–</td>
<td>–0.20*</td>
<td></td>
</tr>
<tr>
<td>Burnout – Emotional Exhaustion</td>
<td>0.43*</td>
<td>0.18*</td>
<td></td>
</tr>
<tr>
<td>Burnout – Cynicism</td>
<td>0.36*</td>
<td>0.29*</td>
<td></td>
</tr>
<tr>
<td>Burnout – Professional Efficacy</td>
<td>–0.17</td>
<td>0.62*</td>
<td></td>
</tr>
<tr>
<td>Work Engagement – Overall</td>
<td>–0.27*</td>
<td>0.44*</td>
<td></td>
</tr>
<tr>
<td>Work Engagement – Vigor</td>
<td>–0.26*</td>
<td>0.49*</td>
<td></td>
</tr>
<tr>
<td>Work Engagement – Dedication</td>
<td>–0.21*</td>
<td>0.35*</td>
<td></td>
</tr>
<tr>
<td>Work Engagement – Absorption</td>
<td>–0.21*</td>
<td>0.37*</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction – Overall</td>
<td>–0.33*</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction – Extrinsic</td>
<td>–0.34*</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction – Intrinsic</td>
<td>–0.28*</td>
<td>0.18*</td>
<td></td>
</tr>
<tr>
<td>Psychological Empowerment – Overall</td>
<td>–0.34*</td>
<td>0.38*</td>
<td></td>
</tr>
<tr>
<td>Psychological Empowerment – Meaning</td>
<td>–0.28*</td>
<td>0.33*</td>
<td></td>
</tr>
<tr>
<td>Psychological Empowerment – Competence</td>
<td>–0.31*</td>
<td>0.50*</td>
<td></td>
</tr>
<tr>
<td>Psychological Empowerment – Self-determination</td>
<td>–0.25*</td>
<td>0.23*</td>
<td></td>
</tr>
<tr>
<td>Psychological Empowerment – Impact</td>
<td>–0.28*</td>
<td>0.21*</td>
<td></td>
</tr>
</tbody>
</table>

Note: AAQ-II: Acceptance and Action Questionnaire; WAAQ: Work-related Acceptance and Action Questionnaire. To minimize family-wise Type I error, we set the alpha level significance at .01.

* \( p < 0.01 \)
Discussion

The data obtained provide promising evidence that this Spanish translation of the WAAQ is a valid and reliable measure of psychological flexibility at the workplace. Overall, the current data are very similar to those obtained by Bond et al. (2013). Specifically, the results showed that the WAAQ has very good internal consistency (α = .92) and construct validity in view that the factor analysis led to a clear one-factor solution and the correlations were in the expected direction with several work-related measures. Small correlations were found, however, with measures of job satisfaction.

Importantly, the correlation between the WAAQ and AAQ-II was small to moderate. This correlation indicates that both instruments are assessing related constructs, but the correlation is not so high as to suggest that they are assessing the same one (Bond et al., 2013). The AAQ-II was also correlated with the work-related variables, except for the burnout variable of professional efficacy. However, the WAAQ was more strongly associated than the AAQ-II with work engagement variables (vigor, dedication, and absorption) and, especially, with efficacy variables of the MBI and EPI. Conversely, the AAQ-II showed stronger correlations with job satisfaction and the burnout variable of emotional exhaustion.

Overall, these findings replicate the study by Bond et al. (2013) and are consistent with the ACT model (Hayes et al., 2006) because they show that a work-specific measure of psychological flexibility is more strongly associated with several work-related outcomes than is a general measure of the same construct. This supports the hypothesis that psychological flexibility is contextually controlled and, therefore, variables related to a specific context may best, or even only, be predicted by a measure of psychological flexibility that is tailored to that particular context (Bond et al., 2013).

Some limitations of this study are worth mentioning. First, the functioning of the WAAQ was tested only in one sample; therefore, further research is necessary to confirm the results obtained in this study. Second, as all data were obtained using self-report measures, relationships among variables might be artificially inflated. Lastly, given the number of variables that we correlated with the WAAQ and AAQ-II, a potential limitation is the threat of a Type I error. To mitigate this threat, alpha level of significance was set at .01.

In conclusion, this Spanish translation of the WAAQ emerges as a reliable and valid measure of psychological flexibility in the work context. The current findings also highlight the benefits of assessing psychological flexibility in relation to the specific context in which people are being examined. Future research might use the WAAQ to analyze whether it shows better predictive or mediating effects than the AAQ-II in cross-sectional and longitudinal studies or after implementing an ACT intervention aimed at improving workplace functioning.

References


